COMMONWEALTH OF VIRGINIA

Virginia Geographic Information Network Division Department of Technology Planning

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November 30, 2001

ADDENDUM NO. 1 TO ALL OFFERORS:

Reference – Request for Proposals: RFP No. 02-03

Commodity: Virginia Base Mapping Program

Dated: November 16, 2001

For Delivery To: Commonwealth of Virginia

Department of Information Technology

On behalf of the

Virginia Geographic Information Network

Department of Technology Planning

Proposals Due: December 10, 2001

Proposal Due Date Changed To: December 14 at 2:00 PM

The following changes are made to the above-mentioned RFP:

- 1. The due date has been changed from December 10 to December 14, 2001 at 2:00 PM.
- 2. Several of the Roman numerals used in the document are incorrect. Please make the following changes:

Section VI. <u>MANDATORY PREPROPOSAL CONFERENCE</u> found on page 20 should be section VII.

Section VII. <u>GENERAL TERMS AND CONDITIONS</u> found on page 21 should be Section VIII.

Section VIII. <u>SPECIAL TERMS AND CONDITIONS</u> found on page 27 should be Section IX.

All references found below will be to the revised section numbers.

3. If a company did not attend the mandatory pre-bid conference, is that company allowed to be part of a project team as a sub consultant?

Answer: An offeror may use as a subcontractor, a firm that did not attend the preproposal conference.

4. Modify Section III.A. Paragraph 1, 3rd Sentence (Page 4) to read as follows:

Coastal areas of the State bordering the Atlantic Ocean or the Chesapeake By shall be buffered by 1000' or the extent of man-made features extending from shore with the exception of the Chesapeake Bay Bridge Tunnel, which shall also only be collected up to the 1000' buffer.

5. Section III.B.1.f (Page 6) specifies a 6-inch focal length camera. Can a 12" focal length camera be proposed for the imagery collected?

Answer: Proposal submissions using traditional film based cameras must be based on a 6-inch focal length camera. A 6-inch focal length is specified in order to support the future development of contour data to the appropriate national standards as follows (although this effort is not within the scope of this request for services):

6-inch resolution imagery to support 2-foot contour development, 1-foot resolution imagery to support 5-foot contour development, and the 2-foot resolution imagery to support 10-foot contour development.

Proposal submissions using Digital Cameras must match the image quality and geometric characteristics as specified and be able to support the identified future data development goals.

6. Modify Section III.B. Paragraph 2 (Page 4) to read:

ASPRS Draft AP Standards (1995) is applicable for aerial photography. Virginia Mapping Standards (1992) will be followed for mapping standards which are based on ASPRS Standards (1990). Accuracy will be 'reported' and 'tested' as per NSSDA Standards. The digital orthoimagery products are required to meet the 'tested' requirements of the NSSDA Standard, which will be performed by VGIN, or its designate.

7. Modify the first two sentences in Section III. B. 2. b, (Page 7) first paragraph to read as follows:

All new ground control used in the project shall be based upon the State of Virginia HARN. The offeror shall describe the method used to ensure homogenous consistency and compliance with standards.

- 8. In Section III.B.2.b Ground Control Requirements, 5th paragraph (Page 8), strike the 5th paragraph.
- 9. Modify Section III.B.3.a. Scanning, 3rd Sentence (Page 8) to read:

A high precision photogrammetric scanner shall be used and the scan resolution shall not exceed 21 microns.

10. Reference Section III.B.3.b items (2) & (3), (Page 8). Do "check points" for the RMSE limits refer to the ground control points pre-paneled or used in the AT process?

Answer: Yes, the checkpoints refer to the pre-paneled or well-defined ground control points used in the AT process.

- 11. Modify Section III.B.4.a. (Page 9), to read:
 - a. The DTM's shall be compiled to produce a topographically consistent and seamless dataset across the state.
- 12. Reference Section III.B.4.b. (Page 9). This section states "In order to avoid unnatural visual appearance of bridge decks in the orthoimagery, edge of pavements shall be included as break lines with the elevations values associated with the bridge decks included in the DTM." This is a common practice, but requires tradeoffs in the treatment of the ground around the bridge. Three methods of treatment are used in general practice: 1) the ground DTM may be collected accurately and completely up to the edge of the bridge. Since the bridge is above ground, this will create a virtual cliff and cause smearing of pixels adjacent to the bridge deck. Cosmetic treatment may be used at a marginal cost to mask the smearing, but the treatment will not always result in a truly accurate or visually appealing representation of the ground. 2) The ground DTM may be altered in the vicinity of the bridge deck to avoid the virtual cliff. Smearing is avoided but the horizontal accuracy of the ground immediately around the bridge will be compromised. This can generally be accomplished at no extra cost and is the most commonly applied treatment. 3) A "true ortho" can be created using multiple scenes from multiple angles. This technique allows accurate representation of the bridge and ground without smearing or distortion of the ground, but would be extremely expensive to apply to every bridge in Virginia. Do you have a preference among the treatment options described above, or is there another alternative intended?

Answer: Either Option 1 or option 2 will generally be acceptable depending on the situation. The goal is to maintain the accuracy of the bridge deck, maintain the accuracy of the ground in the vicinity of bridge deck and to avoid distortion and image smears while accomplishing this. It is understood that it is not always possible to meet all three of these Objectives simultaneously. In situations where one approach is impractical or results in undesirable consequences, the contractor will use the other. VGIN accepts these practices with some limits on the amount of relative displacement allowed for traveled roads or railroads within the affected areas.

13. Section III.B.3.c, (Page 9), discusses radiometric and geometric quality. Is seamlessness also expected between product types (1' and 2' pixels)?

Answer: Yes.

How will seamlessness be evaluated?

Answer: The edges of imagery at different resolutions within the project shall be expected to edge match within mapping accuracy.

The quality characteristics you are seeking can best be achieved by orthorectification of every frame and selection of the most nadir portion of each frame for mosaicing. Since the RFP requirements are subjective, it may be possible to comply using every other frame, but the results would be inferior. The RFP does not specifically require orthorectification of every frame. Is it your intention to allow the contractor to use either approach?

Answer: Yes.

If so, will you give added value to an approach that includes orthorectification of every frame even if the cost is marginally higher?

Answer: See Sections V. Evaluation and Award Criteria and III.B Performance Criteria/Product Specifications

- 14. In Section IV. A.1 (Page 10), please change the number of copies of the proposal each offeror must submit from six (6) to eleven (11).
- 15. Section IV.A.2.d (Page 10), states that the proposal should be "organized in the order in which the requirements are presented". Section IV.B. suggests an outline that does not precisely follow the order in which the requirements are presented in the RFP. Should the proposal be organized according to the outline in IV.B?

Answer: Yes, the proposal should be organized according to the outline in IV.B, Page 12.

- 16. Modify Section IV.B.3.b. (Page 12) to read:
 - b. Offerors shall submit in the Offeror's proposal a detailed project plan for addressing all of the steps in the above process while addressing each of the items in Section III.B by reference number. The project plan should also describe the process used to constrain building lean within the digital orthoimagery and to account for excessive building lean in areas with concentrations of structures over 5 stories.
- 17. Section IV.B.5, (Page 13) requires the contractor to provide information on historic and current small business, WBE and MBE participation. Should the production subcontractors provide that information also if those subcontractors are performing a significant portion of the work?

Answer: Business done by subcontractors in this area cannot be applied to this contract. The offeror can only include business done by the offeror's firm.

18. Section V.A.4, (Page 13) lists the point value for small business, WBE and MBE participation. How will those points be awarded? Is there a participation goal that must be reached to earn maximum points?

Answer: The points will be awarded as follows: The offeror offering the highest percentage of business will get the highest number of points. In other words, if one offeror agrees to do 10% of the contract amount with a minority firm and another offeror agrees to do 5%, then the one offering 10% will be the most points.

There is no set goal.

- 19. On page 16, Section VI. B. a, Project Control, the letter "a" should in fact be a "1".
- 20. In Section VI.B.1.a. (Page 16), delete first sentence
- 21. Modify Section VI.B.4.b, (Page 17) to read:

One DTM Data file for each Digital Orthoimage tile covering the same corresponding area.

22. In Section VI.B.5.e (Page 18), replace the existing section with the following:

Media: The following media products and deliverables are required for this project. Each data product shall be delivered as a separate set on the media type indicated.

(1) Deliverables subject to the Liquidated damages delivery deadlines indicated in Section VIII.F (Page28).

Media & number of copies

	File Content	DVD	DLT
a.	Statewide Coverage of Digital Ortho Imagery by tile		
	(GeoTIFF).	1	-
b.	Statewide Coverage of Digital Terrain Models by tile.	1	-
c.	Statewide Coverage of all Ancillary Data** by tile as	1	-
	appropriate.		
d.	134 Individual County Coverages* of Digital Ortho	1	-
set	Imagery by Tile (GeoTIFF)		
e.	134 Individual County Coverages of Digital Terrain	1	-
set	Models by Tile		
f.	134 Individual County Coverages of all Ancillary	1	-
set	Data** by tile as appropriate.		

(2) Deliverables Not subject to the Liquidated damages delivery deadlines indicated in Section VIII.F (Page28).

> Media & number of copies DVD DLT

File Content

g.	Statewide Coverage of Digital Ortho Imagery by tile (GeoTIFF).	1	1
h.	Statewide Coverage of Digital Terrain Models by tile.	1	1
i.	Statewide Coverage of all Ancillary Data**	-	1
j.	Statewide Coverage of Digital Ortho Imagery	1	-
	Compressed in MrSID format at 18/1 by Tile		

^{*134} individual sets of media, each set containing complete deliverable covering one each of Virginia's 134 counties or cities, [one media set for each of Virginia's cities and counties] buffered by one image tile.

23. Modify Section VI.B.6, (Page 19), to read:

Metadata: The contractor shall provide metadata compiled to the current standard endorsed by the Federal Geographic Data Committee (FGDC) for each data deliverable product set. One metadata record is required for each distinct product set not on a tile-by-tile basis. Currently, this is the content Standard for digital geospatial metadata Version 2 – FGDC-STD-001-1998.

24. Is there a preference for processing of the data within or outside of United States?

Answer: At this time there is no preference for where the processing work is performed.

25. How many AT points will be required to verify the solution?

Answer: 20 check points in a tested area will be required to verify the AT solution in accordance with the NSSDA Testing requirements. The Definition of the number of test areas will be determined by VGIN or its designate. Costs associated with this testing are not a part of this procurement.

26. Section VIII.J.1.a, (Page 23). This section states "Invoices for items ordered, delivered and accepted shall be submitted". Does that mean that invoices cannot be submitted until the deliverables are accepted by the State? If so, why is there a performance bond? What is the acceptance procedure and review time?

Answer: Invoices for deliverables will be accepted on a monthly basis. Payment will be made within 30 days after receipt of invoice and acceptance of the product. The performance bond protects the Commonwealth should the contractor go into default at any point during the contract period. The acceptance and review time is discussed in the revised Section X, which is attached, and in item 28 below.

^{**} All data products produced in the digital ortho development process required to facilitate the efficient development of planimetric or contour features by a 3rd party contractor

27. Attachment B requires submission of financial statements for "the most recent and two preceding fiscal years". Can the "most recent" be the current year to date financials, or do you want three full fiscal years?

Answer: Offerors are required to submit the current and the immediately preceding fiscal years of financial statements

28. For Section IX.F, Liquidated Damages Clause, Page 28, the Commonwealth will use the following Acceptance procedure:

All deliverable products will be reviewed by VGIN or it's designate to determine whether or not the products are acceptable.

Imagery collection will be evaluated by inspection of the AGPS photo centers for compliance with forward and side overlap requirements. Contractor must certify that all imagery for which payment is sought is of a quality and clarity to produce digital orthoimagery for this project. VGIN will notify the contractor within 1 week of data submission of the results of the review.

Ground control and Aerial Triangulation reports will be reviewed and inspected for completeness and adherence to accuracy standards for the project. VGIN will notify the contractor within 2 weeks of data submission of the results of the review.

A 100% Quality check will be conducted on the digital orthoimagery and the DTM. VGIN will notify the contractor within 1 to 4 weeks of data submission (as negotiated per Section X, Method of Payment) of the results of the review. The exact time for Digital orthoimagery and DTM review will be negotiated between VGIN and the contractor when the project and delivery schedules are finalized.

29. Section IX.F, Liquidated Damages Clause, Page 28, is changed to read as follows:

LIQUIDATED DAMAGES, GOODS AND NONPROFESSIONAL SERVICES:

Delivery of the final and accepted product is required not later than 12 months from the date the contract is signed. It is understood and agreed by the offeror that time is of the essence in the delivery of supplies, services, materials, or equipment of the character and quality specified in the proposal document. In the event these specified supplies, services, materials, or equipment are not delivered by the date specified there will be deducted, not as a penalty but as liquidated damages, the sum of \$3,000 per day for each and every calendar day of delay beyond the time specified; except that if the delivery be delayed by any act, negligence, or default on the part of the Commonwealth, public enemy, war, embargo, fire, or explosion not caused by the negligence or intentional act of the contractor or his supplier(s), or by riot, sabotage, or labor trouble that results from a cause or causes entirely beyond the control or fault of the contractor or his supplier(s), a reasonable extension of time as the procuring public body deems appropriate shall be granted. An extension shall be available only if the contractor has notified the Commonwealth in writing at the time of the Commonwealth action or default, or within three days after any other occurrence

justifying the extension. Upon receipt of the above-mentioned prompt written request and justification for any extension from the contractor, the purchasing office shall, if appropriate, grant an appropriate extension of time for performance of the contract or delivery of goods herein specified. Contractor hereby certifies its concurrence that the liquidated damage amount specified above is reasonable in light of the harm that is anticipated to flow from late delivery and the difficulty of proof of loss, and the Contractor hereby waives any claim that such liquidated damages are void as penalties or not reasonably related to actual damages.

30. The Commonwealth assumes that the contractor will be allowed to use existing DEM data (e.g. USGS DEM, existing county/city DEM) so long as the data is updated as necessary and supports orthophoto rectification to the required accuracy. **Please confirm.**

Answer: The use of existing County/City/Town Digital Terrain Models which are current and meet or exceed the accuracy in the performance criteria of section III.B. will be allowed.

- 31. Attached is a revised Section X, Method of Payment.
- 32. Attached is an example of how to complete the Proposal Cost Forms.
- 33. The following statement was read at the prebid conference held on November 27, 2001.

The focus of this request for proposals is for a contractor that can provide photogrammetric products and services. In the Commonwealth of Virginia, photogrammetric services are not defined as professional services in the state code. The products and services, which are the subject of this Request for Proposals, are therefore not being procured using a procedure for professional services.

Does anyone who intends to respond with a proposal to this solicitation take issue with this statement, or plan to file a contest based on the procurement method used to secure the services for this proposal?

There was no response from any of the attendees.

- 34. Attached is a revised copy of Page 44 which is part of the Proposal Cost Forms.
- 35. Will VGIN arrange for over flight permission in those areas required? (airports, military bases)

Answer: Yes

36. Attendees of the prebid conference may request a copy of the tape by sending a check for \$10.00, made out to the Department of Information Technology, to Tim Moore, DIT, 110 South 7th Street, 3rd Floor, Richmond, Virginia 23219.

Note: A signed acknowledgement of this addendum must be received by this office either prior to
the proposal due date and hour or attached to your proposal. Signature on this addendum does not
substitute for your signature on the original proposal document. The original proposal document
must be signed.

	Sincerely,
	Timothy W. Moore Contract Officer Phone: (804) 371-5972
Name of Firm	
Signature/Title	

Date

X. <u>METHOD OF PAYMENT</u>: Payment shall be 30 days from receipt of invoice and verification that VGIN has approved of the product.

Progress payments for the Contracted Services shall be made according to the following milestones: Up to 20% of the contract price upon completion of the imagery collection phase of the Contract Services, based on the percentage of area of the Commonwealth successfully collected, as evidenced by submittal of the AGPS photo centers at the Post-Fling Evaluation Meeting and review and approval by VGIN within 2 weeks, and certification by the contractor that the imagery captured is of sufficient quality and clarity to support the digital orthoimagery development for this project.

10% of the contractor's average fee per tile* (contract price) upon completion of the project control as evidenced by submission of the control report and subsequent review and approval by VGIN within 2 weeks.

15% of the contractor's average fee per tile* (contract price) upon completion of Aerial Triangulation as evidenced by submission of the Aerial triangulation report and review and approval by VGIN within 2 weeks.

Up to 20% of the contract price, based on the contractor's average fee per tile*, upon completion of the Digital Terrain Models and Digital Orthoimages rectification as evidenced by submittal of digital orthoimagery tiles and accompanying Digital Terrain Model tiles, based on number of tiles (these deliverables can be submitted and payments made in incremental stages over the term of the contract based on a negotiated delivery schedule). The time period for review by VGIN (ranging from 1 to 4 weeks) will be negotiated along with (and depending on) the delivery schedule.

Up to 25% of the contract price, based on the contractor's average fee per tile*, for unique tiles, upon completion and delivery of the individual County Digital Orthoimagery data sets as evidenced by submittal of all of the digital orthoimagery and DTM tiles, including all resolutions of digital orthoimagery involved, for an individual County or City and review and approval of the dataset by VGIN within 2 weeks and delivery of all ancillary data within 3 weeks of the successful completion of this review. The planned delivery (payment schedule) will be negotiated between VGIN and the contractor.

The remaining 10% of the project fee shall be paid upon completion and final delivery of all outstanding project deliverables not withstanding delivery of optional reproduction products.

* The average fee per tile as calculated on Attachment D.3.IV. (See example in Attachment D.5.)

Revised page 44

III. 0.5 foot (6 inch) resolution (1:1200)

	Column A.	Column B.	Column C.	Column D.
	. Applicable Tile Range	Projected Tile Totals per	Applicable cost per tile	Tile Total multiplied by Cost per
	(from Offeror Cost Sheet)	range.	(from Offeror Cost Sheet)	Tile (Column B x Column C)
1.			\$	\$
2.			\$	\$
3.			\$	\$
4.			\$	\$

Total Tiles*

5. Total 0.5 foot Cost (Sum of Column D)

IV. TO)TAL	Project	Cost	Calculation
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I.5.D.	Total Cost – 2 foot resolution	\$
II.5.D.	Total Cost – 1 foot	\$
III.5.D.	Total Cost – 0.5 foot resolution	\$

	# TILES			
-				

TOTALS \$

Average Cost / Tile

A

В

A divided by B

^{*}Total Tiles should equal the Tile total estimate for 0.5' resolution provided by VGIN (Extent and distribution of imagery, Page. 5.)

2. Tile Cost Sheet EXAMPLE ONLY

Cost per tile – 2 foot resolution (2 GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 10,000' x 10,000'
		tile
1.	1-20	\$ 150
2.	21-50	\$ 100
3.	51+	\$ 80
4.		\$
5.		\$

Cost per tile – 1 foot resolution (1 GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 5,000' x 5,000' tile
1.	1-10	\$ 250
2.	11-25	\$ 225
3.	26-50	\$ 200
4.	51+	\$ 175
5.		\$

Cost per tile – 6 inch resolution (0.5 GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x
		2,500' tile
1.	1-30	\$ 550
2.	31-50	\$ 500
3.	51-100	\$ 475
4.	101 +	\$ 450
5.		\$

^{*} Offerors must list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

3. TOTAL COST CALCULATION SHEET (EXAMPLE ONLY)

I. 2 foot resolution (1:4800)

	Column A.	Column B.	Column C.	Column D.
	Applicable Tile Range	Projected Tile Totals per	Applicable cost per tile	Tile Total multiplied by Cost per
	(from Offeror Cost Sheet)	range.	(from Offeror Cost Sheet)	Tile (Column B x Column C)
1.	1-20	750	\$ 150	\$ 7,500
2.	21-50		\$	\$
3.	51+	9,786	\$ 80	\$ 782,880
4.			\$	\$

Total Tiles* 10,536

5. Total 2 foot Cost (Sum of Column D) \$ 790,380

II. 1 foot resolution (1:2400)

	Column A.	Column B.	Column C.	Column D.
	. Applicable Tile Range	Projected Tile Totals per	Applicable cost per tile	Tile Total multiplied by Cost per
	(from Offeror Cost Sheet)	range.	(from Offeror Cost Sheet)	Tile (Column B x Column C)
1.	1-10	110	\$ 250	\$ 27,500
2.	11-25	120	\$ 225	\$ 27,000
3.	26-50	2,874	\$ 200	\$ 574,800
4.	51 +	7,025	\$ 175	\$ 1,229,375
	Total Tiles*	10,129		

5. Total 1 foot Cost (Sum of Column D) \$ 1,858,675

^{*}Total Tiles should equal the Tile total estimate for 2' resolution tiles provided by VGIN (Extent and distribution of imagery, pg. 5.)

^{*}Total Tiles should equal the Tile total estimate for 1' resolution provided by VGIN (Extent and distribution of imagery, pg. 5.)

EXAMPLE ONLY

III. 0.5 foot (6 inch) resolution (1:1200)

	Column A.	Column B.	Column C.	Column D.
	. Applicable Tile Range	Projected Tile Totals per	Applicable cost per tile	Tile Total multiplied by Cost per
	(from Offeror Cost Sheet)	range.	(from Offeror Cost Sheet)	Tile (Column B x Column C)
1.	1-10		\$ 550	\$
2.	21-50	242	\$ 500	\$ 121,000
3.	51-100	1,900	\$ 475	\$ 902,500
4.	101+	2,550	\$ 450	\$ 1,147,500
	Total Tiles*	4,692		
		5.	Total 0.5 foot Cost	\$ 2,171,000

(Sum of Column D)

IV. TOTAL Project Cost Calculation

I.5.D.	Total Cost – 2 foot resolution	\$ 790,380
II.5.D.	Total Cost – 1 foot	\$ 1,858,675
III.5.D.	Total Cost – 0.5 foot resolution	\$ 2,171,000

TILES
10,536
10,129
4,692

TOTALS \$ 4,820,055

A

25,357

Average Cost / Tile \$ 190

B A divided by B

^{*}Total Tiles should equal the Tile total estimate for 0.5' resolution provided by VGIN (Extent and distribution of imagery, pg. 5.)